Amendments to the Claims

1. (Previously Presented) An apparatus to deliver a therapeutic agent to a vessel, comprising:

an elongated source of a therapeutic agent, the source having an amount or a concentration of the therapeutic agent that gradually decreases along a length of the elongated source from a location inward of a proximal end to or at the proximal end of the elongated source or from a location inward of a distal end to or at the distal end of the elongated source.

Claim 2 (Canceled).

3. (Previously Presented) The apparatus of claim 1 wherein the source comprises a radioactive intravascular stent or a drug delivery stent.

Claim 4 (Canceled).

5. (Original) The apparatus of claim 1 wherein the source comprises a drug delivery stent having an anti-cell proliferation drug for treatment of the vessel.

6. (Previously Presented) An apparatus for delivering therapeutic radiation to a vessel, comprising:

an elongated radiation delivery source including a radioactive region thereon, the radioactive region having a proximal end and a distal end, and being capable of delivering a therapeutic level of radioactivity, wherein the radioactive region includes a segment gradually transitioning from the therapeutic level to a non-therapeutic level of radioactivity at the proximal end or the distal end of the radioactive region.

7. (Previously Presented) The apparatus of claim 6 wherein the radiation delivery

source comprises an intravascular stent.

Claims 8 and 9 (canceled).

10. (Original) The apparatus of claim 6 wherein the radioactive region comprises a beta particle emitting isotope.

11. (Original) The apparatus of claim 6 wherein the radioactive region comprises a gamma particle emitting isotope.

12. (Original) The apparatus of claim 6 wherein the radioactive region comprises a beta particle and a gamma particle emitting isotope.

Claims 13-20 (**Canceled**).

21. (Previously Presented) An intravascular stent for delivering therapeutic radiation to a vessel, comprising:

a radioactive region along an elongated length of a stent, the radioactive region having an area capable of delivering a substantially uniform dose of radioactivity to a vessel localized at a central portion of the stent, wherein the radioactive region includes a radioactivity gradient at a proximal end or a distal end of the radioactive region, the radioactivity gradient gradually decreasing the dose delivered to the vessel from a therapeutic level to a non-therapeutic level of radioactivity, and wherein the gradient decreases the dose from a location inward of the proximal end to or at the proximal end, or decreases the dose from a location inward of the distal end to or at the distal end of the radioactive region.

22. (Previously Presented) The stent of claim 21 wherein the radiation dose delivered to the vessel inhibits vessel cell proliferation along the elongated length of the stent and past the

proximal end or the distal end of the stent.

23. (Previously Presented) The stent of claim 21 wherein the area capable of delivering the substantially uniform level of radioactivity comprises a greater longitudinal length than the gradient.

24. (Previously Presented) The stent of claim 21 wherein the gradient comprises a uniform rate of decrease of radioactivity level.

25. (Previously Presented) The stent of claim 21 wherein the gradient comprises a variable rate of decrease of radioactivity level.

26. (Withdrawn) The stent of claim 21 wherein the gradient comprises a decrease of radioactivity level by incremental steps.

27. (Original) The stent of claim 21 wherein the radioactive region comprises a beta particle emitting isotope.

28. (Original) The stent of claim 21 wherein the radioactive region comprises a gamma particle emitting isotope.

29. (Original) The stent of claim 21 wherein the radioactive region comprises a beta and a gamma emitting particle isotope.

30. (Previously Presented) The stent of claim 21 wherein the dose of radioactivity comprises up to 60 Gray.

31. (Previously Presented) An intravascular stent for delivering a drug to a vessel, comprising:

a drug delivery region along an elongated length of a stent, the drug delivery region having a variable drug concentration thereon, wherein the drug delivery region

includes an area of substantially uniform drug concentration localized at a central portion of the stent, and wherein the drug delivery region includes a drug concentration gradient at a proximal end or a distal end of the drug delivery region, the drug concentration gradient gradually decreasing from a therapeutic dose level to a non-therapeutic dose level, and wherein the gradient decreases from a location inward of the proximal end to or at the proximal end, or decreases from a location inward of the distal end to or at the distal end of the drug delivery region.

32. (Previously Presented) The stent of claim 31 wherein a drug dose delivered to the vessel inhibits vessel cell proliferation along the elongated length of the stent and past the proximal end or the distal end of the stent.

Claims 33-72 (**Canceled**).

73. (Previously Presented) The stent of Claim 31, wherein the drug delivery region contains a drug selected from the group consisting of an anti-inflammatory compound, an anti-proliferative compound, an anti-migratory compound, an inhibitor of matrix or collagen deposition, and an apoptosis inducer.

Claims 74-85 (**Canceled**).